Amendments To The Claims

Amend claim 46.

1. (Previously presented) A method of processing feathers comprising the step of simultaneously reducing and cleaning said feathers in a reducing apparatus selected from the group consisting of at least one refiner, at least one pulper, and combinations thereof, wherein said feathers are delivered through said reducing apparatus in said step of simultaneously reducing and cleaning in a carrier fluid comprising at least one cleaning agent.

2. (Original) The method of claim 1 wherein said reducing apparatus comprises a disc mill.

3. (Original) The method of claim 1 wherein said reducing apparatus comprises a high shear pulper.

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Previously presented) The method of claim 1 wherein said carrier fluid is an aqueous solution and said cleaning agent is selected from the group consisting of hydrogen peroxide, detergent, surface acting surfactants, bleach and combinations thereof.

8. (Previously presented) The method of claim 7 wherein said cleaning agent comprises hydrogen peroxide.

9. (Previously presented) The method of claim 7 wherein said cleaning agent comprises a detergent.

10. (Original) The method of claim 1 wherein a reduced feather material is produced in said step of reducing and said method further comprising the step of separating said reduced feather material into a fiber material and a quill material.

11. (Original) The method of claim 10 wherein said fiber material and said quill material are separated in said step of separating using at least one hydraulic screen.

12. (Original) The method of claim 10 wherein said fiber material and said quill material are separated in said step of separating using at least one centrifugal cleaner.

13. (Original) The method of claim 10 further comprising the step of drying said quill material in a high agitation dryer.

14. (Original) The method of claim 1 wherein a reduced feather material is produced in said step of reducing and wherein said method further comprises the step of adding a bonding agent to at least a portion of said reduced feather material.

15. (Original) The method of claim 14 further comprising the step of forming a product from said reduced feather material having said bonding agent added thereto.

16. (Original) The method of claim 1 wherein a reduced feather material is produced in said step of reducing and wherein said method further comprises the step of forming a sheet product from said reduced feather material.

17. (Original) The method of claim 1 wherein a reduced feather material is produced in said step of reducing and wherein said method further comprises the step of forming a molded product from said reduced feather material.

18. (Previously presented) The method of claim 1 wherein a reduced feather material is produced in said step of reducing and wherein said method further comprises the step of adding a reduced paper material to at least a portion of said reduced feather material to form a combined reduced material, wherein said reduced feather material is present in said combined reduced material in an amount in the range of from about 40% to about 95% by weight based on the total weight of said combined reduced material and said reduced paper material is present in said combined reduced material in an amount in the range of from about 5% to about 60% by weight based on the total weight of said combined reduced material.

19. (Original) The method of claim 18 further comprising the step of forming a product from said combined reduced material.

20. (Original) The method of claim 19 wherein said product is formed in said step of forming using a sheeting process.

21. (Original) The method of claim 19 wherein said product is formed in said step of forming using a molding process.

22. (Previously presented) The method of claim 21 wherein said molding process uses a molding apparatus comprising a forming section employing a vacuum effective for holding suspended feather fiber on a mold.

23. (Previously presented) The method of claim 18 further comprising the step of adding a bonding agent to said reduced feather material, said reduced paper material, said combined reduced material, or a combination thereof.

24. (Canceled).

25. (Canceled).

26. (Canceled).

27. (Canceled).

28. (Canceled).

29. (Canceled).

30. (Canceled).

31. (Canceled).

32. (Canceled).

33. (Canceled).

34. (Canceled).

35. (Canceled).

36. (Canceled).

37. (Canceled).

38. (Canceled).

39. (Canceled).

40. (Canceled).

41. (Canceled).

42. (Canceled).

43. (Canceled).

44. (Canceled).

45. (Canceled).

46. (Currently amended) The ~~amended~~ method of claim 8 wherein said hydrogen peroxide is present in said carrier fluid in an amount in the range of from about 200 ppm to about 5000 ppm by volume of said aqueous solution.

47. (Previously presented) The method of claim 9 wherein said detergent is present in said carrier fluid in an amount in the range of from about 2 to about 20 pounds of said detergent per ton of said feathers.

48. (Previously presented) The method of claim 10 further comprising the step of drying said quill material in a high velocity vortex dryer effective for grinding at least a portion of said quill material into substantially spherical particles.

49. (Previously presented) The method of claim 48 further comprising the step, following said step of drying, of recovering a quill product by delivering said quill material through at least one cyclone separator.

50. (Previously presented) The method of claim 16 wherein in said step of forming, said sheet product is formed from said reduced feather material using a sheeting apparatus comprising a forming box having a plurality of vacuum sections effective for removing water from said reduced feather material.

51. (Previously presented) The method of claim 17 wherein in said step of forming, said molded product is formed from said reduced feather material using a molding apparatus comprising a forming section employing a vacuum effective for holding suspended feather fiber on a mold.

52. (Previously presented) The method of claim 18 wherein said reduced feather material is present in said combined reduced material in an amount in the range of from about 80% to about 90% by weight based on the total weight of said combined reduced material and said paper material is present in said combined reduced material in an amount in the range of from about 10% to about 20% by weight based on the total weight of said combined reduced material.

53. (Previously presented) The method of claim 18 wherein said reduced paper material is formed by reducing recycle paper, craft paper, or a combination thereof.

54. (Previously presented) The method of claim 18 wherein, in said step of adding, said reduced paper material and said reduced feather material are each delivered to a slurry tank wherein said reduced paper material and said reduced feather material are mixed together to form said combined reduced material.

55. (Previously presented) The method of claim 20 wherein in said step of forming, said product is formed from said combined reduced material using a sheeting apparatus comprising a forming box having a plurality of vacuum sections effective for removing water from said combined reduced material.

56. (Previously presented) A method of processing feathers comprising the steps of:

(a) reducing said feathers in at least one refiner, at least one pulper, or a combination thereof to form a reduced feather material and

(b) forming a combined reduced material comprising said reduced feather material and reduced paper,

wherein said reduced feather material is present in said combined reduced material in an amount in the range of from about 40% to about 95% by weight based on the total weight of said combined reduced material and said reduced paper is present in said combined reduced material in an amount in the range of from about 5% to about 60% by weight based on the total weight of said combined reduced material.

57. (Previously presented) The method of claim 56 wherein said reduced feather material is present in said combined reduced material in an amount in the range of from about 80% to about 90% by weight based on the total weight of said combined reduced material and said reduced paper is present in said combined reduced material in an amount in the range of from about 10% to about 20% by weight based on the total weight of said combined reduced material.

58. (Previously presented) The method of claim 56 wherein said reduced paper is formed by reducing recycle paper, craft paper, or a combination thereof.

59. (Previously presented) The method of claim 56 wherein in step (c), said reduced paper and said reduced feather material are each delivered to a slurry tank wherein said reduced paper and said reduced feather material are mixed together to form said combined reduced material.

60. (Previously presented) The method of claim 56 further comprising the step of (c) forming a product from said combined reduced material.

61. (Previously presented) The method of claim 60 wherein said product is formed in step (c) using a sheeting process.

62. (Previously presented) The method of claim 61 wherein in step (c), said product is formed from said combined reduced material using a sheeting apparatus comprising a forming box having a plurality of vacuum sections effective for removing water from said combined reduced material.

63. (Previously presented) The method of claim 60 wherein in step (c), said product is formed from said combined reduced material using a molding process.

64. (Previously presented) The method of claim 63 wherein said molding process uses a molding apparatus comprising a forming section employing a vacuum effective for holding suspended feather fiber on a mold.

65. (Previously presented) The method of claim 60 further comprising the step of adding a bonding agent to said reduced feather material, said reduced paper, said combined reduced material, or a combination thereof.